



TEXAS TECH UNIVERSITY SYSTEM™



Using ERM Tools

Chancellor's Strategic Initiative

Office of Risk Management

February 9, 2017

Tool Box



- **Enabling Document** – establishes correlation between Enterprise Risk Management and Continuity of Operations Planning.
- **Potential Major Risks** – a brainstorming tool
- **ERM Matrix and Rating Scales** – tool used for risk identification and rating assessment
- **Automated Heat Map** – tool for graphing the final 8 risks and depicting them relationally

Matrix and Rating Scales



Begin the process with this tool. There is no limit to the depth within the institution. In fact, ERM is intended for the entire organization.

The next few slides illustrate the process.

ERM Matrix and Rating Scales – Risk Matrix



	A	B	C	D
1	Institution	Risk	Risk Type (Strategic, Financial, Operational/IT, Compliance)	Impact
2	TTUS	Insufficient continuity of operations planning	Financial/Operational	2.00
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				

Start on this tab

Risk Matrix Impact Likelihood Velocity Preparedness

READY 100%

ERM Matrix and Rating Scales – Risk Matrix



	A	B	C	D
	Institution	Risk	Risk Type (Strategic, Financial, Operational/IT, Compliance)	Impact
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3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				

This column can be used to describe any institutional level.

Risk Matrix Impact Likelihood Velocity Preparedness

READY

100%

ERM Matrix and Rating Scales – Risk Matrix



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6				
7				
8				
9				
10				
11				
12				
13				

Insert a brief description

Risk Matrix Impact Likelihood Velocity Preparedness

READY 100%

ERM Matrix and Rating Scales – Risk Matrix



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12				
13				

Determine the type from the *impact* tab

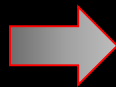
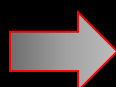
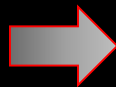
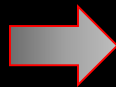
Risk Matrix Impact Likelihood Velocity Preparedness



ERM Matrix and Rating Scales - Impact

Risk Type →

I
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t



		IMPACT			
		Financial	Operational	Compliance	Strategic
Level		Resources, financial structure, ability to meet future financial needs, financial reporting	Continuity of activities, safety and security, IT operations, physical infrastructure, process efficiency, program effectiveness	Legal, regulatory, contractual, accreditation body, NCAA, or other requirements	Organizational reputation, constituent relationships, ability to generate funds, goal achievement
1	Minor	Insignificant financial impact	Negligible interruption to activities. Minor information technology event. No loss of infrastructure. Negligible effect on efficiency and effectiveness.	Minor incidental compliance violations	No discernable negative impact to reputation and/or goal achievement. Minor media coverage. Negative effect on constituent satisfaction or relationships.
2	Moderate	Notable financial impact	Brief or limited interruption of activities. Notable information technology event. Minor loss of infrastructure. Moderate loss of process efficiency and/or program effectiveness.	Repetitive or systemic compliance violations	Notable temporary negative impact to reputation and/or goal achievement. Some media coverage. Constituent dissatisfaction or strain on relationships.
3	Major	Material financial impact	Major interruption of activities. Major information technology event. Localized loss of infrastructure. Moderate safety or security concerns.	Major compliance violations	Major negative impact to reputation and/or goal achievement. National media coverage. Constituent dissatisfaction and loss of relationships.
4	Severe	Financial impact threatens solvency or ability to continue operations	Extensive interruption of activities. Significant information technology event. Significant loss of infrastructure. Significant safety or security concerns.	Significant, chronic, and/or pervasive compliance violations	Significant negative impact to reputation and/or goal achievement. Persistent national and/or international media coverage. Significant loss of workforce, patients, students and/or donor base.



ERM Matrix and Rating Scales – Risk matrix

Institution	Risk	Risk Type (Strategic, Financial, Operational/IT, Compliance)	Impact	Likelihood	Preparedness	Velocity	Explanatory Notes
TTUS	Insufficient continuity of operations planning	Financial/Operational	2.00	2.00	4.00	3.00	COOP lays the foundation to return to normal operations quickly. ORM is acquiring a tool and has hired staff to support the implementation of a systemwide COOP.
Operations	Single supplier of critical parts	Strategic/Operational					

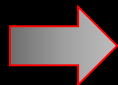
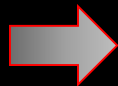
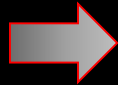
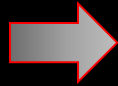
Impact, Likelihood, Preparedness and Velocity have specific rating scales on the respective tabs, illustrated on the following slides.



ERM Matrix and Rating Scales - Impact

Risk Type →

I
m
p
a
c
t



		IMPACT			
		Financial	Operational	Compliance	Strategic
Level		Resources, financial structure, ability to meet future financial needs, financial reporting	Continuity of activities, safety and security, IT operations, physical infrastructure, process efficiency, program effectiveness	Legal, regulatory, contractual, accreditation body, NCAA, or other requirements	Organizational reputation, constituent relationships, ability to generate funds, goal achievement
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Impact rating does not have to be a whole number.

You may determine a risk is “severely” moderate. Assigning a rating of 2.75 is valid.

ERM Matrix and Rating Scales – Impact



Institution	Risk	Risk Type (Strategic, Financial, Operational/IT, Compliance)	Impact	Likelihood	Preparedness	Velocity	Explanatory Notes
TTUS	Insufficient continuity of operations planning	Financial/Operational	2.00	2.00	4.00	3.00	COOP lays the foundation to return to normal operations quickly. ORM is acquiring a tool and has hired staff to support the implementation of a systemwide COOP.
Operations	Single supplier of critical parts	Strategic/Operational	2.75				

Impact rating recorded in matrix.

ERM Matrix and Rating Scales - Likelihood



LIKELIHOOD		
Given the potential risks and effectiveness of existing controls, how likely is it that we will experience a risk event under the activity?		
Level	Category	Average Frequency
1	Very unlikely	Remote possibility of occurrence. (e.g., More than 3 years out)
2	Unlikely	More than remote possibility of occurrence (e.g., Every 1 to 3 years)
3	Likely	Happens with some frequency (e.g., Likely to happen this year)
4	Very likely	Expected to happen or happens often (e.g., Several times per year)

Select a rating which corresponds to how often you believe the risk could have an impact.



ERM Matrix and Rating Scales – Risk matrix

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TTUS	Insufficient continuity of operations planning	Financial/Operational	2.00	2.00	4.00	3.00	COOP lays the foundation to return to normal operations quickly. ORM is acquiring a tool and has hired staff to support the implementation of a systemwide COOP.
Operations	Single supplier of critical parts	Strategic/Operational	2.75	1			

Likelihood rating recorded in the matrix.



ERM Matrix and Rating Scales - Preparedness

PREPAREDNESS		
Prevention, detection, recovery, backups, response plans, communication plans, insurance, notifications, emergency management planning		
Level	Category	Description
1	Very Prepared	Significant preparation efforts and risk mitigation strategies are in place. Very few identified issues and/or opportunities for improvement/enhancement exist.
2	Prepared	Moderate preparation efforts and risk mitigation strategies are in place. Some identified issues and/or opportunities for improvement/enhancement exist. Minimal possibility of other unidentified issues or opportunities.
3	Somewhat Prepared	Minimal preparation efforts in place. Major issues and/or opportunities for improvement/enhancement exist. Moderate possibility of other unidentified issues or opportunities.
4	Very Unprepared	Virtually no preparation is in place. Significant identified issues and/or opportunities for improvement/enhancement exist. Strong possibility of other unidentified issues or opportunities.

Select a rating which corresponds to how well prepared with effective prevention, mitigation and response plans you believe the department, division, college, etc. is.

ERM Matrix and Rating Scales – Risk matrix



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Operations	Single supplier of critical parts	Strategic/Operational	2.75	1	3		

Preparedness rating recorded in the matrix.

ERM Matrix and Rating Scales - Velocity



VELOCITY	
How quickly can the risk impact the organization?	
Level	Category
1	One Year or Greater
2	Weeks to Months
3	Days to Weeks
4	Hours to Days

Select a rating which corresponds to how quickly you believe the risk could have an impact.



ERM Matrix and Rating Scales – Risk matrix

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Operations	Single supplier of critical parts	Strategic/Operational	2.75	1	3	3.5	

Velocity rating recorded in the matrix.



ERM Matrix and Rating Scales – Risk matrix

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Operations	Single supplier of critical parts	Strategic/Operational	2.75	1	3	3.5	

Explanatory Notes:

Brief factual description of the risk and prevention or mitigation actions or plans. Include a statement helpful in describing the risk.

Repeat the Process



Repeat the process just illustrated for each risk identified inserting the data in subsequent rows.



TEXAS TECH UNIVERSITY SYSTEM™

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